

Date: Monday, 14/04/2008 1:07:33 PM
 User: Julie Lecocq

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : 3"SKIDTUBE LIGHT "I" BEAM EXTRUSION
Job Number : 38589	
Estimate Number : 10306	
P.O. Number :	Part Number : D26005108
This Issue : 14/04/2008 S.O. No. :	Drawing Number : D2600 REV D1
Prsht Rev. : NC	Project Number : N/A
First Issue : 1/1 Type : PURCHASED PARTS	Drawing Revision : D1
Previous Run : 29985	Material :
Written By :	Due Date : 30/04/2008 Qty: 240 Um: Each
Checked & Approved By : JLO 08.4.14	
Comment : Est F 02.09.10 Added DSK 066 KJ/RF	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: Issue P/O: 10165

- a) Extrude as per Dwg D2600
- b) Material: 6061-T6 (QQ-A-200/8)
- c) Minimum yield tensile strength = 35 ksi
- d) Minimum ultimate tensile strength = 40 ksi
- e) Minimum elongation = 8%
- f) Order at 108" long
- g) Caradon Indalex Tool # MS-18871
- h) To be packed per DSK 066
- i) Pull test to ASTM standard B221 required.
- j) Material certification is required

C/O 08/04/17

240

2.0	D26005108P	Extrusion 'I Beam' thin
-----	------------	-------------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total: 110.0000 Each(s)
 EXTRUSION "I" BEAM THIN

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: Receive & Inspect For Transit Damage
 Ensure certification is attached

08/04/2

230

4.0	QC6	DIMENSIONAL CHECK
-----	-----	-------------------



Comment: DIMENSIONAL CHECK

- 1-Inspect dimensions per Dwg D2600
- 2-Check Pull test per Dwg D2600 for compliance page attached.
- 3-Check hardness with Webster tester

08/05/05 230

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 14/04/2008 1:07:34 PM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 3"SKIDTUBE LIGHT "I" BEAM EXTRUSION

Job Number: 38589

Part Number: D26005108

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 26

Q-m

08.05.05

230

6.0

QC21

FINAL INSPECTION/W/O RELEASE



08/05/06 MF

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 08-05-06

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>DR</i>	DRAWN BY <i>DR</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>AS</i>	DRAWING NO. D2600	REV. 0 SHEET 1 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1
A	97.01.21	NEW ISSUE	
B	97.09.09	CHANGE MATERIAL SPEC.	
C	98.04.16	ADD D2600-3, UPDATE D2600-1 WIDTH, ADD DIE NO.	
D	98.08.20	INCREASE MIN. UTS TO 40 KSI	
DI	01.04.17	ADD PART NUMBERS + DIE NUMBERS <i>4-CP</i>	

RELEASED
18.08.25 DS

GENERAL NOTES

1. MATERIAL: 6061-T6 (QQ-A-200/8)

MINIMUM YIELD TENSILE STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 40 ksi
MINIMUM ELONGATION = 8 %

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED
TO ASTM STANDARD B221 BY AN APPROVED TESTING
FACILITY TO ENSURE THAT THE BATCH MEETS THE
ABOVE MINIMUM MECHANICAL PROPERTIES.

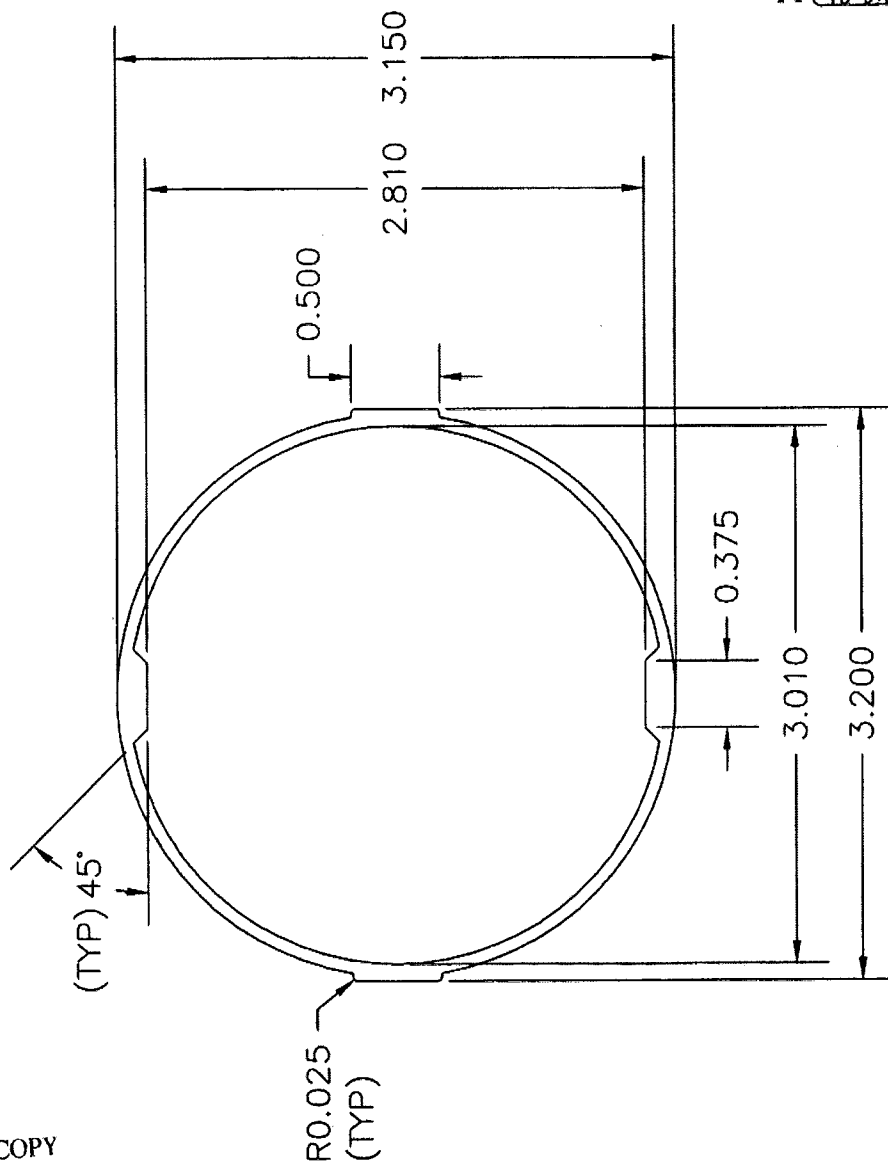
2. BREAK ALL SHARP CORNERS 0.010 MAX.
3. NO TOOLING MARKS.
4. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE
NOTED.
5. ALL DIMENSIONS ARE IN INCHES.

SHOP COPY
RETURN TO
ENGINEERING
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *38589*



DESIGN <i>DP</i>	DRAWN BY <i>DP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>DP</i>	DRAWING NO. D2600	REV. D SHEET 2 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1

RELEASED
98.8.25 DS



D2600-1

MANUFACTURED WITH CARADON INDALOX DIE # MH-18870

OR 80W L DIE # 897121 (PREFERRED CHOICE)

PART NUMBER IS D2600-1-XXX WHERE XXX IS CUT LENGTH IN INCHES (EG. D2600-1-160 IS 160" LONG)

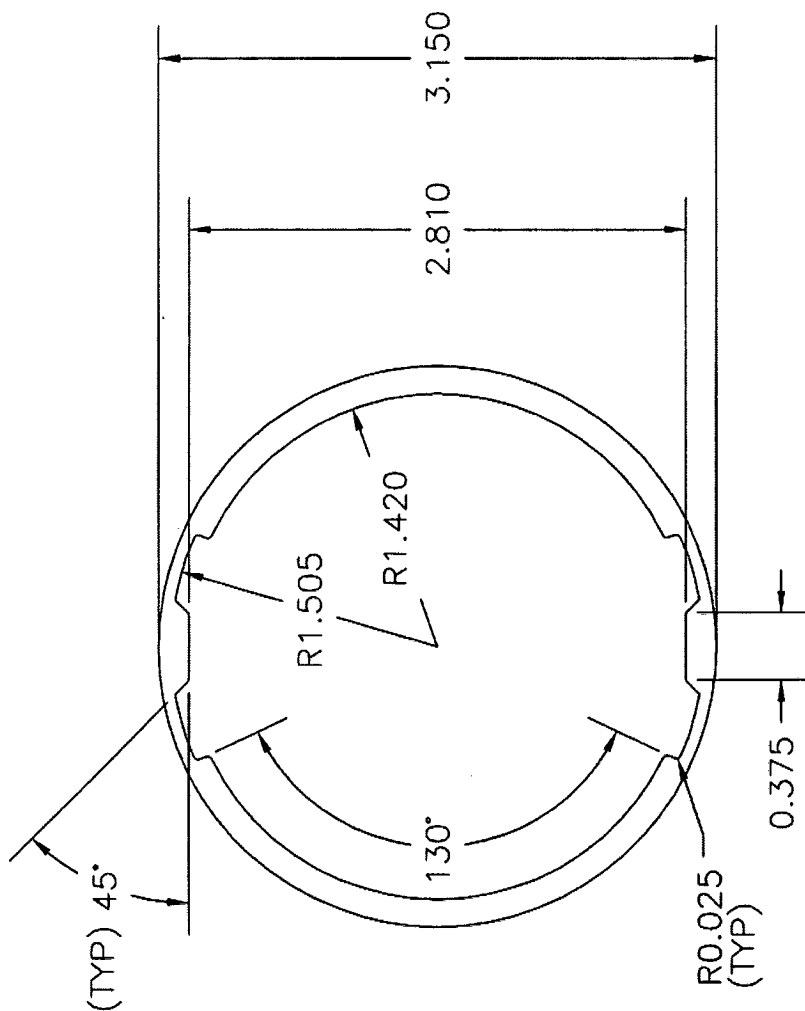


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WORK ORDER
NO. 38589



DESIGN <i>DIP</i>	DRAWN BY <i>DIP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>KE</i>	DRAWING NO. D2600	REV. D SHEET 3 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1

RELEASED
98.8.25 DS



D2600-3

MANUFACTURED WITH CARADON INDALEX DIE # MH-18859

OR BON L DIE # 897122 (PREFERRED CHOICE)

PART NUMBER IS D2600-3-XXX WHERE XXX IS CUT LENGTH IN INCHES (E.G. D2600-3-120 IS 120" LONG)

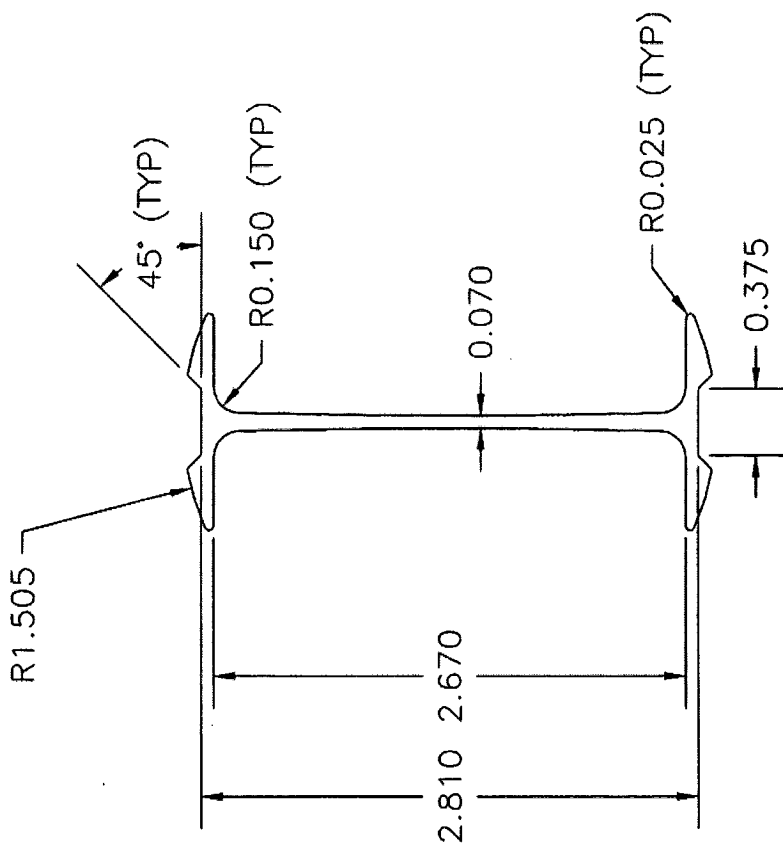


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NO. 38589



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2600	REV. D SHEET 4 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1

RELEASED
98.8.25. DS



D2600-5

MANUFACTURED WITH CARADON INDALEX DIE # MS-18871
PART NUMBER IS D2600-5-XXX WHERE XXX IS CUT LENGTH IN INCHES
(EG. D2600-5-108 IS 108" LONG)

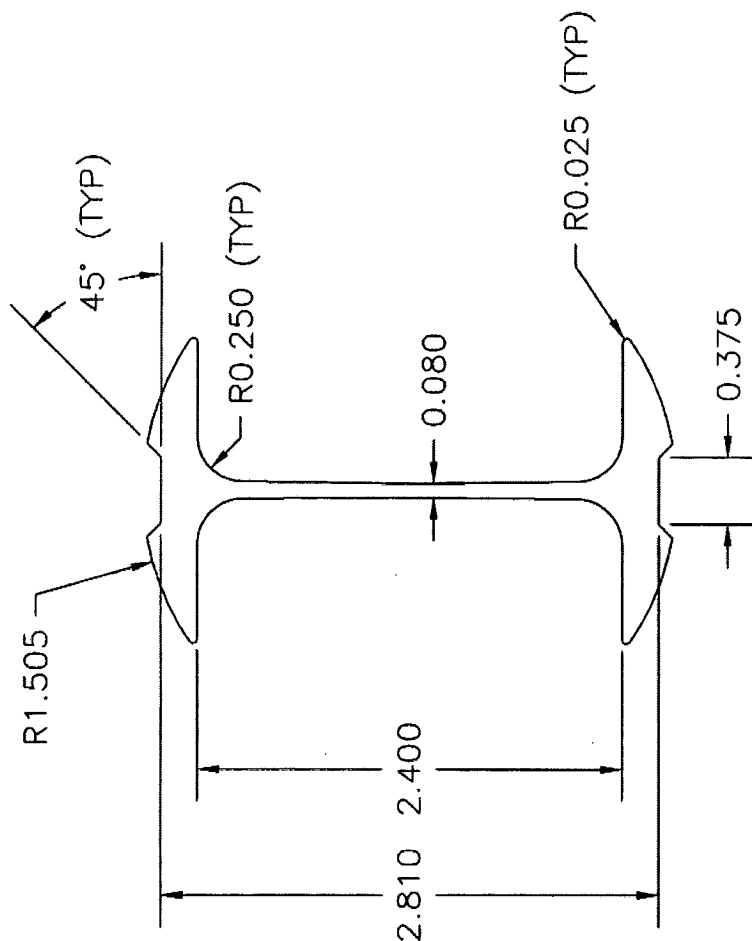


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WORK ORDER
NO. 38587



DESIGN <i>DR</i>	DRAWN BY <i>DR</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>AS</i>	DRAWING NO. D2600	REV. D SHEET 5 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1

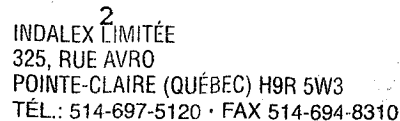
RELEASED
98.8.25 DS



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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 38587

D2600-7
MANUFACTURED WITH CARADON INDALEX DIE # MS-18872
PART NUMBER IS D2600-7-XXX WHERE XXX IS CUT LENGTH IN INCHES
(EG. D2600-7-125 IS 125" LONG)





P/S#: 656504

NOTRE NUMÉRO DE COMMANDE
OUR ORDER NO.

8041731-31

EXPÉDIÉ / SHIP TO

INDICATIONS SPÉCIALES
SPECIAL INSTRUCTIONS

K6A1K7

CUSTOMER P.S.T. : *6122-5207

INDALEX G.S.T. REG NO: R136834041

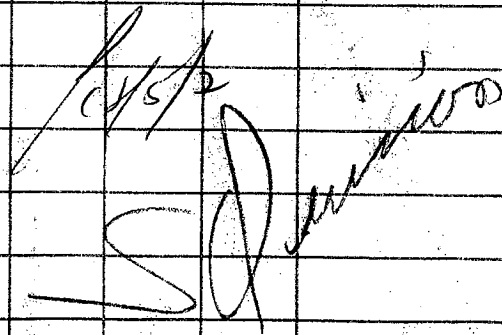
PROJ:

Required Date:

NO DU CLIENT CUST NO 201355		T.P.S. G.S.T. XXXXXX		TAXE DE VENTE PROV. PROV. SALES TAX		N° DE COMM. DU CLIENT CUST ORDER NO. 6165		DATE DE COMMANDE ORDER DATE 8/04/17		NOTRE DATE DE COMM. OUR ORDER DATE 8/04/17		CONDITIONS TERMS					
VENDEUR SALESMAN 51		EXPÉDIE PAR SHIP VIA NOTRE CAMION OUR TRUCK		PAVE PPD X		PERC. COL. 		C.A.D. C.O.D. 		F.A.B. F.O.B. NOTRE USINE OUR PLANT		EN BALLOTS BUNDLED AND TAPED		CARTONNE CARTONED		CARTONNE & INTERCALÉ CARTONED & INTERLEAVED	

DATE DE LIVRAISON DATE SHIPPED	8/05/01	ENVOYÉ PAR SHIPPED VIA	OTTAWA 2 MAI
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[illegible]

COMMANDE / ORDERED		CETTE EXPEDITION THIS SHIPMENT			MONTANT AMOUNT
POIDS WEIGHT	PIECES PIECES	BALLOTS BDLES	POIDS WEIGHT	PCES / PCS.	
		2	495	230	POIDS EN KG
					



INDALEX LIMITED
325 AVRO Street
POINTE-CLAIRE, QC H9R 5W3
TELEPHONE: (514) 697-5120 & (800) 563-5120
FACSIMILE: (514) 694-8310 & (800) 563-8310

FACSIMILE TRANSMITTAL SHEET

TO: Christina Young

FROM: Bruno Morency
Quality Technician

COMPANY:

DART AEROSPACE LTD

DATE:

2008/04/30

FAX NUMBER:

1(613) 632-4443

TOTAL NO. OF PAGES INCLUDING COVER:

2

PHONE NUMBER:

SENDER'S REFERENCE NUMBER:

SUBJECT:

REPORT

TIME:

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

Mechanical properties report.

FAXED
30AP08

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325 rue Avro
Pointe-Claire QC H9R 5W3

Téléphone (514) 697-5120
Fac-simile (514) 694-8310

Rapport des propriétés mécaniques Mechanical Properties Test Report

Client / Customer : **DART AEROSPACE LTD**
Adresse / Address : **1270 ABERDEEN STREET
HAWKESBURY ONT,
K6A 1K7**

FAKED
30 APR 08

commande Indalex / Indalex order # : **8041731**

bon de commande / Purchase order # : **6165**

de matrice / Die # : **MS 18871** Description : **D-2600-5 Light Duty Web**

Alliage & trempage / Alloy & temper : **6061 T6**

Contrôle / Control # : **73081-1**

Coulée / Cast # : **43238**

	Min.requis Min.required	Résultat actuel Actual results
Tension ultime Ultimate stress (psi)	38 000	38812
Contrainte élastique Yield stress (psi)	35 000	35434
% élongation dans 2" % elongation in 2"	8	12
Dureté Rockwell E (hre) Rockwell E Hardness (hre)	88 @ 100	90

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6063	0,20 - 0,60	0,35 Max	0,10 Max	0,10 Max	0,45 - 0,90	0,10 Max	0,10 Max	0,10 Max
6005	0,60 - 0,90	0,35 Max	0,10 Max	0,10 Max	0,40 - 0,60	0,10 Max	0,10 Max	0,10 Max
6005A	0,68 - 0,72	0,15 - 0,27	0,08 - 0,12	0,20 - 0,24	0,48 - 0,52	0,03 Max	0,05 Max	0,03 Max
6061	0,40 - 0,80	0,70 Max	0,15 - 0,40	0,15 Max	0,80 - 1,20	0,04 - 0,35	0,25 Max	0,15 Max
6351	0,7 - 1,3	0,5 Max	0,10 Max	0,40 - 0,80	0,40 - 0,80	—	0,20 Max	0,20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme ASTM B-221 excepté pour la section 8.2 (nombre de spécimen) et AMS QQA 200/8 excepté pour la section 4.2.3.1 (nombre de spécimen) qui sont déterminés par les exigences du client.

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221 except for section 8.2 (number of specimen) and AMS QQA 200/8 except for section 4.2.3.1 (number of specimen) which is determined by customer requirement.

Sincèrement vôtre,
Yours truly,

date : 2008-04-30

Bruno Morency
Technicien de la qualité
Quality technician

Indalex Limited